

DETAILED ACTION

Claims 1 - 21 are cancelled by applicant's Preliminary Amendment filed on May 27, 2004.

Claims 22, 24, 31 - 33, and 43 have been amended.

Claims 23 and 25 have been cancelled.

Claims 22, 24, and 26 – 43 are pending.

Response to Amendment

1. Objection to the claims for informalities is withdrawn in light of the amendments to the claims.

Response to Arguments

2. Applicant's arguments, regarding amended claims, filed July 15, 2008, with respect to the rejection(s) of claim(s) 22, 33, and 43 under 35 U.S.C. 102(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of amended subject matter.

Prior Art Rejections

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 22, 24, 26 – 33, 35 – 39, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickens et al., U.K. Patent Application GB 2,388,504 A (herein Dickens), in view of Huang et al., U.S. Patent 6,931,475 (herein Huang)

5. Regarding claim 22, Dickens teaches: a video signal compensating circuit for receiving video signal components of a video signal including red, green and blue video signals from a remote video source (figure 1, element 116); a signal injection circuit for injecting a plurality of test pulses for receipt by said video signal compensating circuit (figure 1, element 114; page 15, lines 28-29); a skew timing circuit coupled to said signal injection circuit for automatically measuring a skew of said plurality of test pulses received to determine delay or delays to apply to one or more of said video signal

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components (figure 1, element 122), and a delay circuit coupled to said video signal compensating circuit for applying said delay or said delays to said video signal components (figure 1, 122, figure 2) wherein the signal injection circuit automatically generates said plurality of test pulses response to user selection (page 17, lines 30 – 31; page 19, lines 20 – 28; page 20, lines 2 – 3).

Dickens does not teach: selecting the remote video source.

Huang teaches: selecting the remote video source (claim 5).

A person of ordinary skill in the art, at the time of the invention, would find it obvious to combine the teachings of Dickens, a system for providing automatic video signal compensation through a signal injection circuit, a skew timing circuit, and a delay circuit through a request generated by the user, with the teaching of Huang user selection of a remote video source, for the purpose of simplification of management of multiple remote video sources (Huang: column 1, lines 51 – 60).

Additionally, one of ordinary skill in the art would have recognized the known problem of signal skew from remote video sources (Dickens: page 1, lines 8 - 15). One of ordinary skill in the art would have recognized there are a limited number of methods to select a remote video source (Huang: column 2, lines 5 – 21), and a limited number of methods to initiate the generation of test pulses for skew correction (Dickens: page 17, lines 30 – 31). One of ordinary skill in the art could have pursued the known potential options, including initiating automatic video signal compensation not on user command, but on the user selection of a remote video source, with a reasonable expectation of success.

6. Regarding claim 24, Dickens and Huang teach the limitations of the parent claim, claim 22. Dickens additionally teaches: each of said test pulses as being a square wave (page 5, lines 29-30). And in view of the motivation previously stated above, for claim 22, the claim is rejected.

7. Regarding claim 26, Dickens and Huang teach the limitations of the parent claim, claim 22. Dickens additionally teaches: A memory coupled to said video signal compensating circuit for storing values of said delays (page 22, lines 30-33). And in view of the motivation previously stated above, for claim 22, the claim is rejected.

8. Regarding claim 27, Dickens and Huang teach the limitations of the parent claim, claim 26. Dickens additionally teaches: a video signal compensating circuit measuring said skew by comparing a combined amplitude of said test pulses to a reference amplitude (page 21, lines 14-22). And in view of the motivation previously stated above, for claim 22, the claim is rejected.

9. Regarding claim 28, Dickens and Huang teach the limitations of the parent claim, claim 27. Dickens additionally teaches: a video signal compensating circuit determining said delay or said delays by measuring said skew for each combination of said components received utilizing said delay circuit (page 21, lines 14-22), storing results of said measuring in said memory (page 22, lines 30-33), comparing said results to said

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reference amplitude (page 23, lines 1-14), and calculating said delay or said delays closest to said reference amplitude (page 24, lines 10-20). And in view of the motivation previously stated above, for claim 22, the claim is rejected.

10. Regarding claim 29, Dickens and Huang teach the limitations of the parent claim, claim 22. Dickens additionally teaches: a delay circuit including at least one inductor-capacitor circuit (page 2, lines 31-34). And in view of the motivation previously stated above, for claim 22, the claim is rejected.

11. Regarding claim 30, Dickens and Huang teach the limitations of the parent claim, claim 22. Dickens additionally teaches: a delay circuit including at least one printed circuit board comprising at least one printed delay circuit (page 4, lines 6-10). And in view of the motivation previously stated above, for claim 22, the claim is rejected.

12. Regarding claim 31, Dickens and Huang teach the limitations of the parent claim, claim 22. Dickens additionally teaches: a delay circuit including a red delay circuit, a green delay circuit and a blue delay circuit, each of said red, green and blue delay circuits being coupled to video signal compensating circuit (page 4, lines 23-26). And in view of the motivation previously stated above, for claim 22, the claim is rejected.

13. Regarding claim 32, Dickens and Huang teach the limitations of the parent claim, claim 22. Dickens additionally teaches: an override circuit for providing manual

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adjustment of said delay circuit (page 19, lines 20). And in view of the motivation previously stated above, for claim 22, the claim is rejected.

14. Regarding claim 33, Dickens teaches: A switching system including circuitry for providing automatic compensation of video signals (abstract); a computer interface device for transmitting test pulses and video signals (figure 1, element 114; page 15, lines 28-29); said computer interface device including: a signal injection circuit for generating said test pulses (figure 3, element 148); a user interface device coupled to said computer interface device, said user interface device including: a signal receiving circuit for receiving said test pulses and said video signals from a remote video source (figure 1, element 116); a skew timing circuit coupled to said signal injection circuit for automatically measuring a skew of said received test pulses (figure 1, element 122); and a delay circuit for determining and automatically applying one or more delays to one or more of said components (figure 1, element 122, figure 2); wherein the signal injection circuit automatically generates said test pulses in response to selection (page 17, lines 30 – 31; page 19, lines 20 – 28; page 20, lines 2 – 3).

Dickens does not teach: selecting the remote video source.

Huang teaches: selecting the remote video source (claim 5). And in view of the motivation previously stated above, for claim 22, the claim is rejected.

15. Dickens teaches all limitation of the parent claim 33, as cited above. Dickens does not explicitly teach in the claimed embodiment: said delay circuit including at least

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one inductor-capacitor circuit. Dickens does teach: a delay circuit includes at least one inductor-capacitor circuit (page 2, lines 31-34).

A person of ordinary skill in the art, at the time of the invention, would find it obvious to combine the teachings of Dickens, as cited for claim 33, with the teachings of Dickens a delay circuit including an inductor-capacitor circuit, for the purpose of creating an efficient delay mechanism. Inductor-capacitor delay circuits are a well known design method, and the combination of the teachings would yield predictable results (page 2, lines 31-34).

16. Regarding claim 35, Dickens and Huang teach the limitations of the parent claim, claim 33. Dickens additionally teaches: a delay circuit including at least one printed circuit board comprising at least one printed delay circuit (page 4, lines 6-10). And in view of the motivation previously stated above, for claim 22, the claim is rejected.

17. Regarding claim 36, Dickens and Huang teach the limitations of the parent claim, claim 33. Dickens additionally teaches: each of said test pulses as a square wave pulse (page 5, lines 29-30). And in view of the motivation previously stated above, for claim 22, the claim is rejected.

18. Regarding claim 37, Dickens and Huang teach the limitations of the parent claim, claim 33. Dickens additionally teaches: a computer interface device coupled to said user

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interface device via at least one Category 5 cable (page 12, line 13). And in view of the motivation previously stated above, for claim 22, the claim is rejected.

19. Regarding claim 38, Dickens and Huang teach the limitations of the parent claim, claim 33. Dickens additionally teaches: a switch for selecting transmission of either said test pulses or said video signals (page 20, lines 11 – 22). And in view of the motivation previously stated above, for claim 22, the claim is rejected.

20. Regarding claim 39, Dickens and Huang teach the limitations of the parent claim, claim 38. Dickens additionally teaches: a control circuit for generating a control signal to control said switch (page 20, lines 11 – 22). And in view of the motivation previously stated above, for claim 22, the claim is rejected.

21. Regarding claim 43, Dickens teaches: generating test signals at a computer interface, said test signals including one such signal for each of said red, green and blue components (figure 3, element 148); receiving said test signals at a user interface (figure 1, element 116); calculating a difference of time in said receiving (figure 1, element 116); determining a delay for application to one or more of said red, green, or blue components; producing a signal for introducing said delay (figure 1, element 116); and applying automatically said delays to one or more of said red, green, or blue components (figure 1, element 122; page 19, lines 20 – 28).

Dickens does not teach: detecting a selection of a video signal source.

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Huang teaches: detecting a selection of a video signal source (claim 5, column 3, lines 34 – 44). And in view of the motivation previously stated above, for claim 22, the claim is rejected.

22. Claims 40 – 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickens and Huang, in view of Yee (Herein Yee), U.S. Patent Number 5,010,499.

23. Regarding claim 40, Dickens and Huang teach all limitations of the parent claim 33. Dickens does not teach: a composite switch for creating composite signals comprising said test pulses and said video signals.

Yee teaches: a composite switch for creating composite signals comprising said test pulses and said video signals (claim 8).

A person of ordinary skill in the art, at the time of the invention, would find it obvious to combine the teachings of Dickens, as cited for claim 33, with the teachings of Yee, a composite switch for video and test pulses, for the purpose of creating an inexpensive method of video calibration without interfering or interrupting the video signal being transmitted to the user (Yee: Column 2, lines 31 – 34; 46 - 52). In video applications it important to maintain the video signal to the user during skew detection. One of ordinary skill in the art would recognize the benefits the inexpensively composite switch and the teachings of Dickens, and the combination would yield a predictable result.

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24. Regarding claim 41, Dickens and Yee teach all the limitation of the parent claim 40. Dickens does not teach: an extraction circuit for extracting said test pulses from said composite signals.

Yee teaches: an extracting circuit for extracting said test pulses from said composite signals (claim 8). And in view of the motivation previously stated above, for claim 40, the claim is rejected.

25. Regarding claim 42, Dickens and Yee teach all the limitation of the parent claim 40. Dickens does not teach: an extraction circuit for extracting said video signals from said composite signals.

Yee teaches: an extraction circuit for extracting said video signals from said composite signals (claim 8). And in view of the motivation previously stated above, for claim 40, the claim is rejected.

Conclusion

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dickens et al. U.S. Publication Number 2004/0017514

Kawabata, U.S. Patent 5,384,781 regarding automatic skew calibration.

27. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL F. MCMAHON whose telephone number is (571)270-3232. The examiner can normally be reached on M-Th 8am-5pm(EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques can be reached on (571)272-6962. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John P Trimmings/
Primary Examiner,
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Dfm
10/23/08